

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application:

The Claims:

1. **(Currently Amended)** A method comprising, ~~with use of a processor~~:
~~determining an original digital matrix image to be scaled,~~
~~Selecting a scaling ratio R by setting integers X, Y, and Z, wherein the scaling ratio R~~
~~corresponds approximately to an equation Y/(Z*X) and wherein Y < Z,~~
~~receiving, from a first processor at a second processor, coarse scaling the original matrix~~
~~by using a ratio 1/X to create pixels of an intermediate matrix having a coarse scaling ratio~~
~~1/X as compared to an original matrix, and~~
~~fine scaling, by the second processor, the intermediate matrix by using a ratio Y/Z to~~
~~create a final matrix image having a scaling ratio R as compared to the original matrix;~~
~~where X, Y, and Z are non-zero integers,~~
~~Y < Z,~~
~~the scaling ratio R corresponds approximately to an equation Y/(Z*X), and~~
~~coarse scaling is simpler than fine scaling, and~~
~~where a value of the ratio 1/X is selected for coarse scaling the original matrix so as to~~
~~reduce a memory requirement and a computational requirement when fine scaling the~~
~~intermediate matrix.~~
2. **(Currently Amended)** A method according to Claim 1, wherein the ~~second fine~~ scaling is performed, after the first scaling, to ~~the a~~ pixel group calculated for the intermediate matrix, without completing the calculation of the entire intermediate matrix.
3. **(Currently Amended)** A method according to Claim 1, ~~wherein further comprising~~ selecting the integer X is selected to be as great as possible, according to the integers maximums selected for Y and Z and the selected scaling ratio R.

4. (Currently Amended) A method according to Claim 1, wherein further comprising selecting the integer X is selected to be as great as the greatest possible as the power of two according to the scaling ratio R.

5. (Currently Amended) A method according to Claim 1, wherein further comprising selecting X, Y and Z so that 1/X is approximately Y/Z.

6. (Currently Amended) An apparatus comprising:

memory areas configured to store an original digital matrix image to be scaled, for data to be processed, and configured to store an output image matrix, a central processing unit (CPU) configured to process the original matrix image in two stages by a selected scaling ratio R, in the first stage the original matrix is coarse scaled, by a first processor, by using a ratio 1/X to create pixels of the intermediate matrix, and in the second stage each pixel of the intermediate matrix is fine scaled, by a second processor, by using a ratio Y/Z, and wherein an equation $Y/(Z*X)$ corresponds approximately to a scaling ratio R and wherein $Y < Z$, and

~~where coarse scaling is simpler than fine scaling, and where a value of the ratio 1/X is selected for coarse scaling the original matrix so as to reduce a memory requirement and a computational requirement when fine scaling the intermediate matrix.~~

7. (Previously Presented) An apparatus according to Claim 6, wherein the apparatus is integrated in connection with the image sensor of a camera.

8. (Currently Amended) An apparatus according to Claim 7, wherein the apparatus incorporates a host system and the ~~coarse-scaler~~ first processor is integrated in connection with the image sensor of a camera and the ~~fine-scaler~~ second processor is integrated in the host system.

9. (Canceled).

10. (Previously Presented) An apparatus according to Claim 6, wherein the apparatus includes a memory for the scaling function of at most 4 image-sensor lines for each color component.

11. (Previously Presented) An apparatus according to Claim 6, wherein the apparatus is fitted to a mobile station.

12. (Currently Amended) A computer-readable memory having software stored thereon and the software when executed by a central processing unit (CPU) performs:

~~determining an original digital matrix image to be scaled,~~

~~selecting a scaling ratio R by setting integers X, Y, and Z, wherein the scaling ratio R corresponds approximately to an equation $Y/(Z*X)$ and wherein $Y < Z$,~~

~~receiving coarse scaling the original matrix by using a ratio $1/X$ to create a pixels of an intermediate matrix having a coarse scaling ratio $1/X$ as compared to an original matrix, and~~

~~fine scaling the intermediate matrix by using a ratio Y/Z to create a final image matrix having a scaling ratio R as compared to the original matrix;~~

~~where X, Y, and Z are non-zero integers,~~

~~$Y < Z$,~~

~~the scaling ratio R corresponds approximately to an equation $Y/(Z*X)$, and~~

~~coarse scaling is simpler than fine scaling, and where a value of the ratio $1/X$ is selected for coarse scaling the original matrix so as to reduce a memory requirement and a computational requirement when fine scaling the intermediate matrix.~~

13. (Currently Amended) A method according to Claim 1, ~~wherein further comprising displaying the first, coarse scaling [[is]] in an analog form.~~

14. (Currently Amended) An apparatus according to Claim 6, ~~wherein further comprising a display configured to display the first, coarse scaling [[is]] in an analog form.~~

15. (**Currently Amended**) A computer-readable memory according to Claim 12, wherein the software when executed by a central processing unit further performs displaying the first, coarse scaling [[is]] in an analog form.

16. (**New**) A method according to Claim 1, further comprising selecting a value of the ratio $1/X$ for coarse scaling the original matrix so as to reduce a memory requirement and a computational requirement when fine scaling the intermediate matrix.

17. (**New**) A method according to Claim 1, further comprising selecting X, Y and Z so that Y/Z is greater than or equal to $1/2$ and less than or equal to 1.

18. (**New**) A method according to Claim 1, further comprising:
receiving, at the first processor, the original matrix;
coarse scaling the original matrix by using the ratio $1/X$ to create pixels of the intermediate matrix, and
sending, from the first processor to the second processor, the intermediate matrix.

19. (**New**) A computer-readable memory according to Claim 12, wherein the software when executed by a central processing unit further performs selecting a value of the ratio $1/X$ for coarse scaling the original matrix so as to reduce a memory requirement and a computational requirement when fine scaling the intermediate matrix.

20. (**New**) A computer-readable memory according to Claim 12, wherein the software when executed by a central processing unit further performs selecting X, Y and Z so that Y/Z is greater than or equal to $1/2$ and less than or equal to 1.